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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------------|------------------|
| 10/715,672   | 11/17/2003  | Hsi-Jung Chuang      | 13987                      | 4814             |
| 23676  | 7590        | 07/19/2006           |                            |                  |
| SHELDON & MAK, INC<br>225 SOUTH LAKE AVENUE<br>9TH FLOOR<br>PASADENA, CA 91101 |             |                      | EXAMINER<br>AFZALI, SARANG |                  |
|  |             |                      | ART UNIT<br>3726           | PAPER NUMBER     |

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/715,672

Applicant(s)

CHUANG, HSI-JUNG

Examiner

Sarang Afzali

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 18-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/17/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11172003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of Group I and Species "A" drawn to claims 1-12 and 14-17 in the reply filed on 05/09/2006 is acknowledged.

Claim 13 and 18-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 05/09/2006.

### *Drawings*

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Reference number 32 is not shown on Figure 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

3. The disclosure is objected to because of the following informalities:

In specification, page 5, lines 3-5, numeral reference numbers 26 and 28 are referring to top and bottom rails and numeral reference numbers 30 and 32 are referring to side rails and louvers. However, from Figure 2, it seems that the numeral reference numbers 26, 28, and 30 should respectively refer to bottom rail, side rails louvers. As for numeral reference number 32, it is not clear what it is referring to.

Appropriate correction is required.

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed such as the elected method claims.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 14-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14, lines 8-10, "manufacturing a plurality of frame stocks varying in width by a frame stock width interval up until a maximum width difference" is confusing. It is

not clear what the maximum width difference is? What is a frame stock width interval and how long is it? What defines the maximum width difference?

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 2, 4-12, and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dronigi (US 6,474,034) in view of Atkinson (US 2003/0061238 A1).

As applied to claim 1, Dronigi teaches a method of making a shutter assembly by forming a frame assembly (11, Figs. 1 & 6b1) sized to the opening in wall (20, Fig. 6b1), the frame assembly having a panel opening (inside opening of the frame assembly 11, Fig. 6b1); selecting one of the pre-formed louver assemblies (louver assembly made of top and bottom rails 13 and first and second side rails 14, and plurality of louvers 15, Figs. 1 & 6b1), the selected louver assembly being sized to be accommodated by the panel opening (opening defined by the frame assembly 11, Fig. 6b1); and coupling the selected louver assembly to the frame assembly at the panel opening to form a shutter assembly (coupled by means of hinges 122, Fig. 6b1).

Dronigi teaches the invention cited with the exception of the step of obtaining a collection of differently sized pre-formed louver assemblies.

However, it is well-known in the field of manufacturing to provide a collection of prefabricated and preassembled parts and assemblies and a system to access and retrieve them as needed in order to provide a desired part used in a desired configuration such as one taught by Atkinson.

Note that Atkinson teaches that an object oriented product configuration system is utilized to create several different profile object 36 by selecting from the collection of part type objects 32 that have already been created resulting in a final assembly part object 180 (paragraphs [0054], lines 20-25) and [0055], lines 1-3) in order to provide a fully automated system that is compatible with numerous types of software applications and less complex (paragraph [0008], lines 1-6) that can access a collection of different profiles of assembled parts in a timely and flexible manner .

It would have been obvious to one of ordinary skill in the art at the time of invention to have provided Dronigi with a product configuration system that would have allowed a more flexible and automated option of providing a collection of differently sized preformed louver assemblies to be used in a shutter assembly process.

As applied to claim 2, Dronigi teaches that a portion of the louver assembly is removed (cut transversely to size) in the step of coupling the selected louver assembly to the frame assembly in order to fit the louver assembly within the panel opening (col. 3, lines 21-26).

As applied to claims 4-11, Dronigi/Atkinson teach the invention cited with the exception of at least 25 differently sized louver assemblies (claim 4), minimum width

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about 18" and maximum width about 72" (claim 5), width interval from about  $\frac{1}{2}$ " to about 5" (claim 6), width interval from about  $\frac{1}{2}$ " to about  $1\frac{1}{2}$ " (claim 7), minimum height of about 36" and maximum height of about 72" (claim 8), height interval from about  $\frac{1}{2}$ " to about 5" (claim 9), height interval from about 3" to about 4" (claim 10), and up to about 2" removable from each of the rails (claim 11).

It would have been obvious matter of design choice to use any of the above sizes, ranges and numbers, since applicant has not disclosed that only the above mentioned numbers can be used to resolve any stated problem and it appears that the invention would perform equally well with other sizes and numbers as one with ordinary skill in the art finds suitable to use in order to fit a louver assembly within a frame around a wall opening to provide an accurate and suitable shutter assembly.

In addition, note that Dronigi teaches different profiles with different shapes and sizes used in fitting the louver assembly with the frame assembly (Figs. 1-8).

Furthermore, as applied to claims 4-10, it would have been obvious to one of ordinary skill in the art at the time of invention to have used the above mentioned numbers, ranges and sizes, since it has been held where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

In addition, as applied to claim 11, it would have been obvious to one of ordinary skill in the art at the time of invention to have removed up to about 2" from each of the top and bottom rails for adjusting the sizes in order to mount within a certain sized

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frame, since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954).

As applied to claim 12, Dronigi teaches that a frame assembly portion (frame element 11 and insert portion 24, Fig. 5) is mountable over a custom window opening portion (20, Fig. 5) to alter the size of the panel opening.

As applied to claim 14, Dronigi teaches a method of making a shutter assembly by manufacturing a plurality of frame stocks varying in width by a frame stock width (Figs. 1-6d show plurality of different width frame stocks 11); forming at least one of the plurality of frame stocks into a frame assembly sized to fit the opening (wall opening 20, Fig. 6b1) with the frame assembly having a panel opening (opening defined by the frame assembly 11, Fig. 6b1); selecting one of the pre-formed louver assemblies (louver assembly made of top and bottom rails 13 and first and second side rails 14, and plurality of louvers 15, Figs. 1 & 6b1), the selected louver assembly being sized to be accommodating by the panel opening; and coupling the selected louver assembly to the frame assembly at the panel opening to form a shutter assembly (coupled by means of hinges 122, Fig. 6b1).

Dronigi teaches the invention cited with the exception of the step of obtaining a collection of differently sized pre-formed louver assemblies.

However, it is well-known in the field of manufacturing to provide a collection of prefabricated and preassembled parts and assemblies and a system to access and



retrieve them as needed in order to provide a desired part used in a desired configuration such as one taught by Atkinson.

Note that Atkinson teaches that an object oriented product configuration system is utilized to create several different profile object 36 by selecting from the collection of part type objects 32 that have already been created resulting in a final assembly part object 180 (paragraphs [0054], lines 20-25) and [0055], lines 1-3) in order to provide a fully automated system that is compatible with numerous types of software applications and less complex (paragraph [0008], lines 1-6) that can access a collection of different profiles of assembled parts in a timely and flexible manner .

It would have been obvious to one of ordinary skill in the art at the time of invention to have provided Dronigi with a product configuration system that would have allowed a more flexible and automated option of providing a collection of differently sized preformed louver assemblies to be used in a shutter assembly process.

As applied to claims 15-17, Dronigi/Atkinson teach the invention cited with the exception of at least 25 differently sized louver assemblies (claim 15), L-shaped frame stock and Z-shaped frame stock, width stock of about 1/8" and maximum width difference of about 3/4" (claim 16), and L-shaped frame stock and Z-shaped frame stock, width stock of about 1/16" and maximum width difference of about 3/4" (claim 17).

It would have been obvious matter of design choice to use any of the above shaped and sized frame stocks, since applicant has not disclosed that only the above mentioned shapes and numbers can be used to resolve any stated problem and it appears that the invention would perform equally well with other shapes and sizes as

one with ordinary skill in the art finds suitable to use in order to fit a louver assembly within a frame around a wall opening to provide an accurate and suitable shutter assembly.

In addition, note that Dronigi teaches different profiles with different shapes and sizes used in fitting the louver assembly with the frame assembly (Figs. 1-8).

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dronigi in view of Atkinson and further in view of Pitt (US 5,072,561). Dronigi/Atkinson teach the invention cited with the exception of explicitly teaching the step of refinishing after removing a portion of a rail.

However, Pitt teaches louver assemblies designed for ease of field custom trimming (col. 1, lines 3-7) wherein any louver assembly components can be cut and readily field coated to maintain the overall integrity of the previously cut louver component providing a weather-proof and corrosion-proof louver components (col. 2, lines 41-47).

It would have been obvious to one of ordinary skill in the art at the time of invention to have provided Dronigi/Atkinson with a refinishing step as taught by Pitt in order to provide an aesthetically acceptable and more durable shutter assembly.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarang Afzali whose telephone number is 571-272-4526. The examiner can normally be reached on 7:00-3:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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7/1/2006

  
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7-3-06